STATE OF MARYLAND

# DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

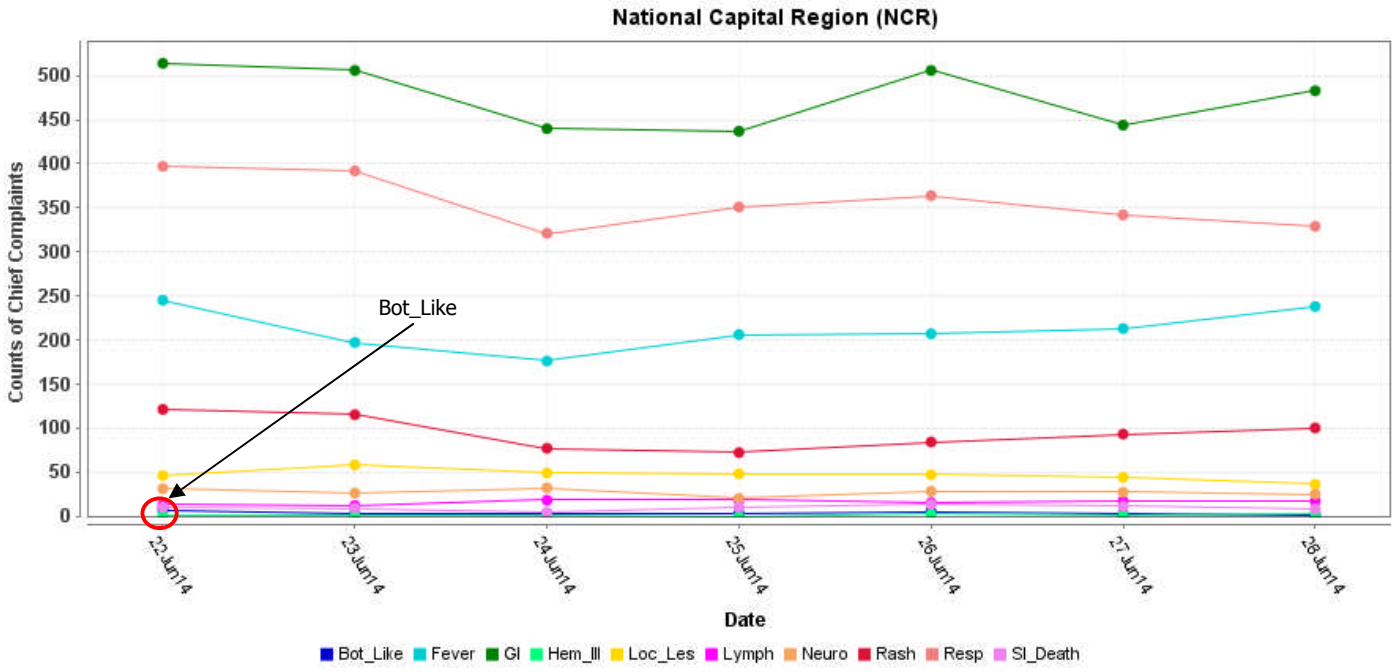
## July 3, 2014

# Public Health & Emergency Preparedness Bulletin: # 2014:26
# Reporting for the week ending 06/28/14 (MMWR Week #26)

**CURRENT HOMELAND SECURITY THREAT LEVELS**

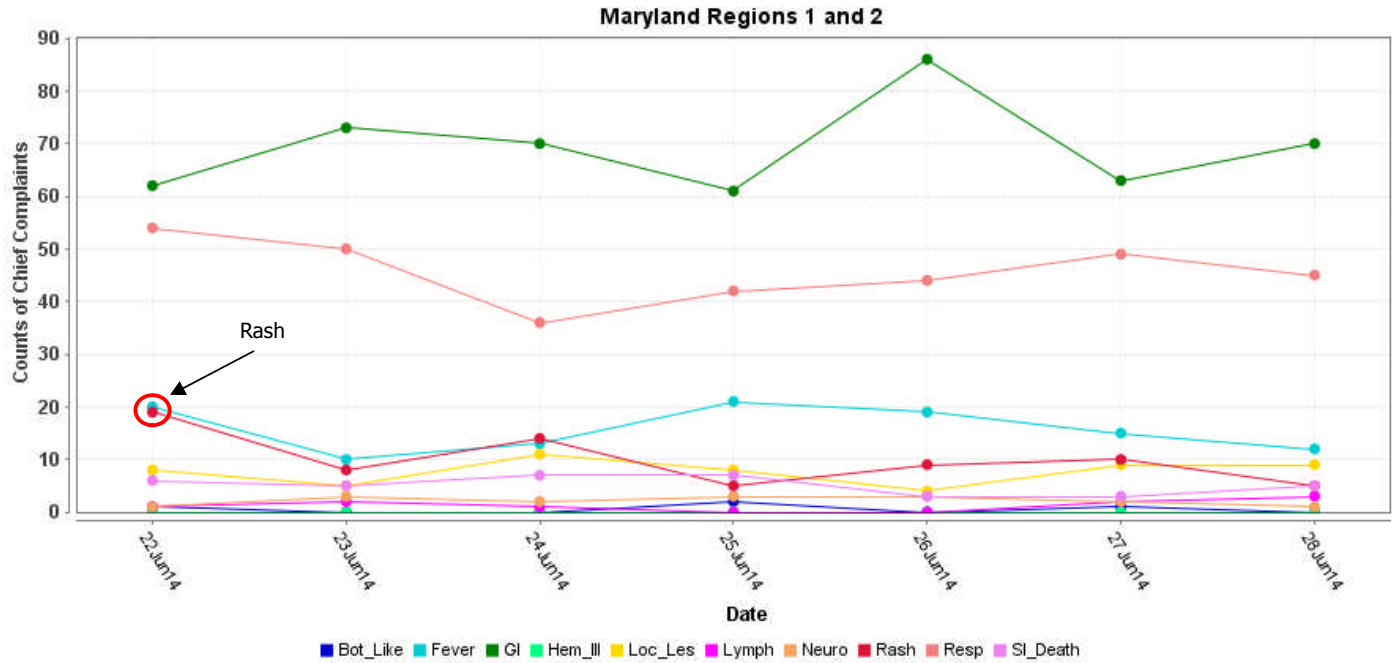
**National:** **No Active Alerts**
**Maryland:** **Level Four (MEMA status)**

**SYNDROMIC SURVEILLANCE REPORTS**
**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

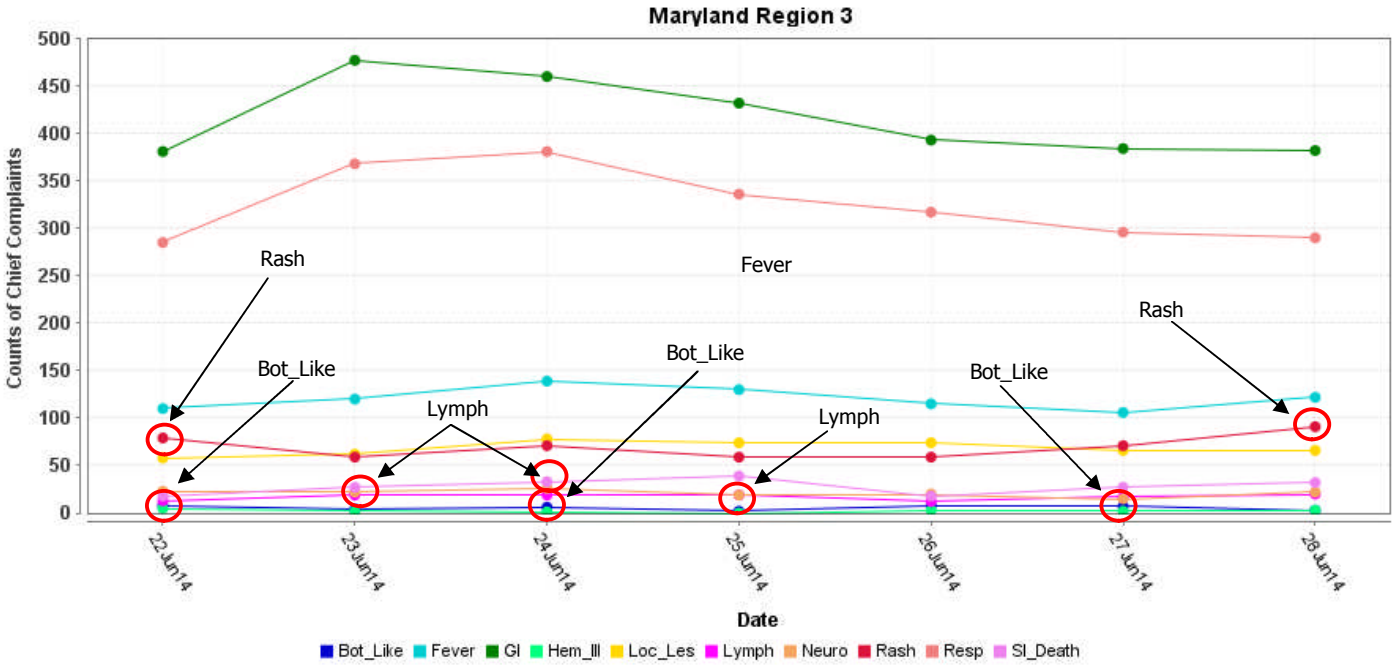



*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

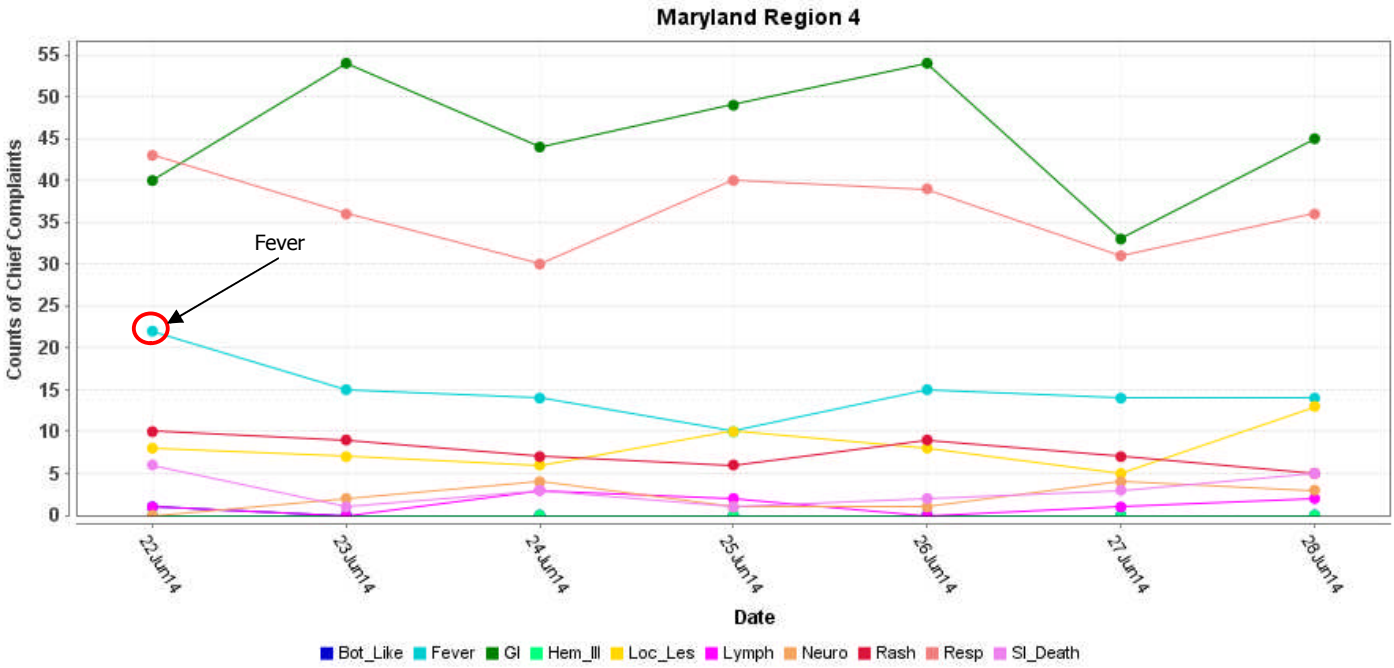
**MARYLAND ESSENCE:**



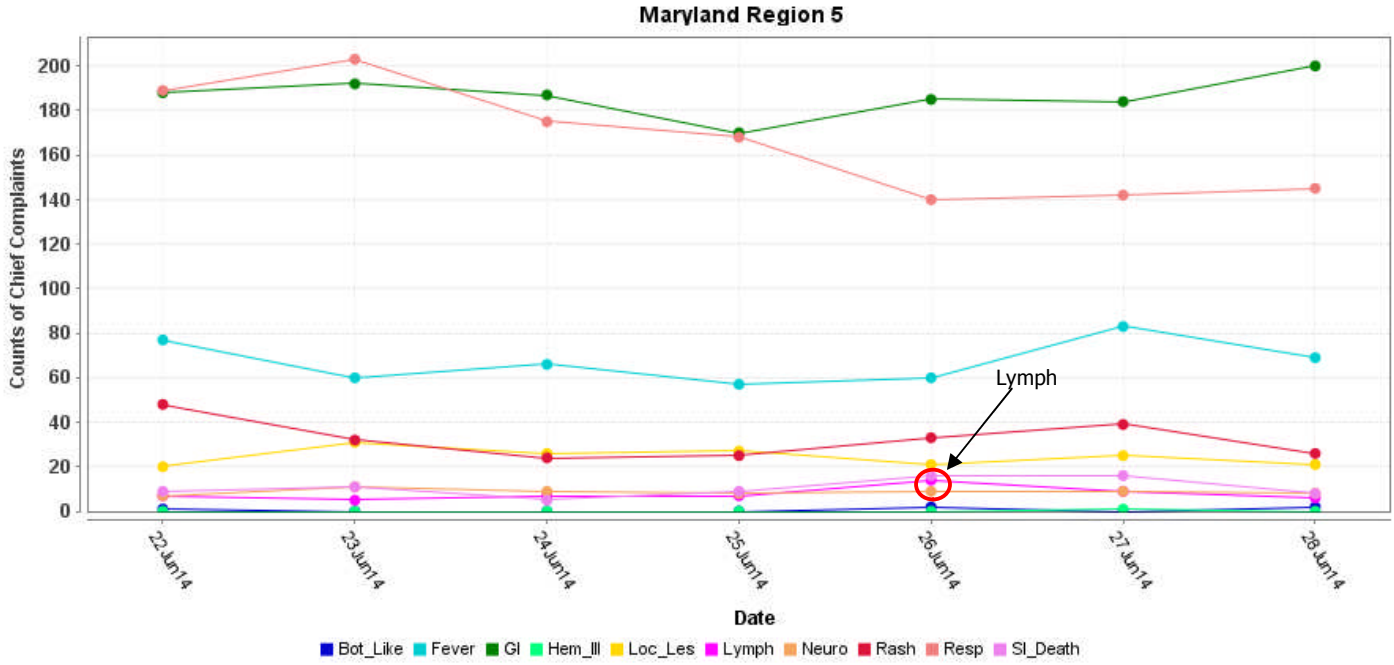

* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE




* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



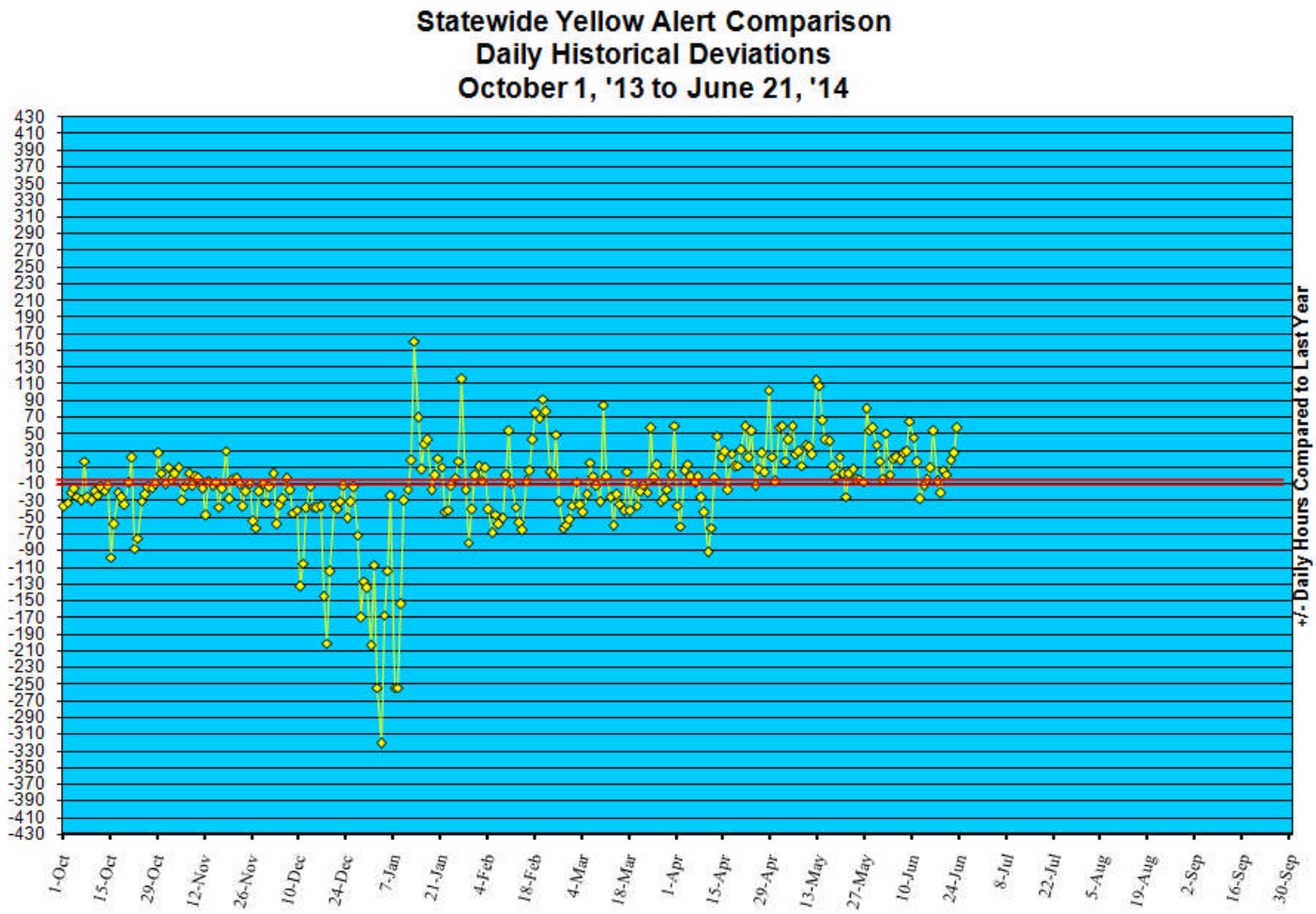

* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE




* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

**REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/13.




**REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to an emerging public health threat for the week.

**MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in May 2014 did not identify any cases of possible public health threats.

**REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

**COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

| **Meningitis:** | **Aseptic** | **Meningococcal** |
|---|---|---|
| New cases (June 22 - June 28, 2014): | 9 | 0 |
| Prior week (June 15 - June 21, 2014): | 8 | 0 |
| Week#26, 2013 (June 23 - June 29, 2013): | 2 | 0 |

**6 outbreaks were reported to DHMH during MMWR Week 26 (June 22 - June 28, 2014)**

1 Respiratory Illness Outbreak
1 outbreak of PNEUMONIA in a Nursing Home

5 Rash Illness Outbreaks
1 outbreak of SCABIES in a Residential Facility
4 outbreaks of HAND, FOOT, AND MOUTH DISEASE associated with Daycare Centers

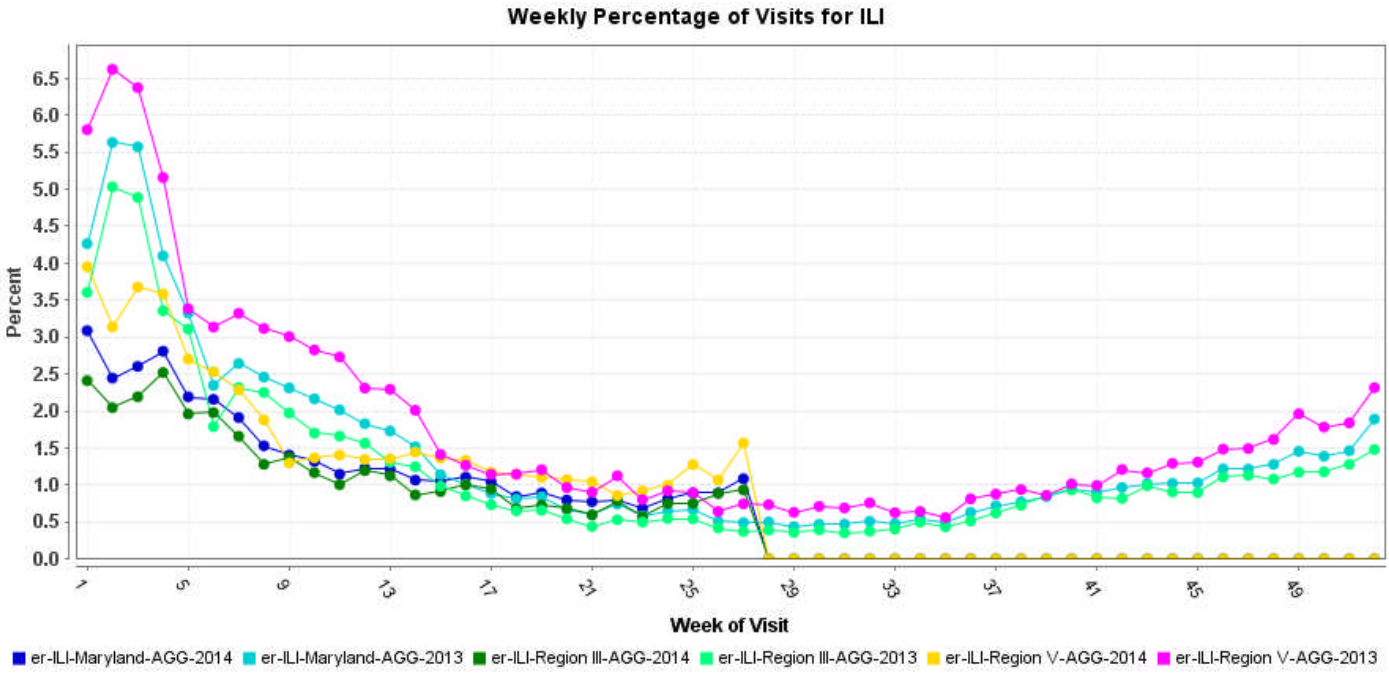
## MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting generally occurs October through May. The final reporting period for 2014 was MMWR Week 20.

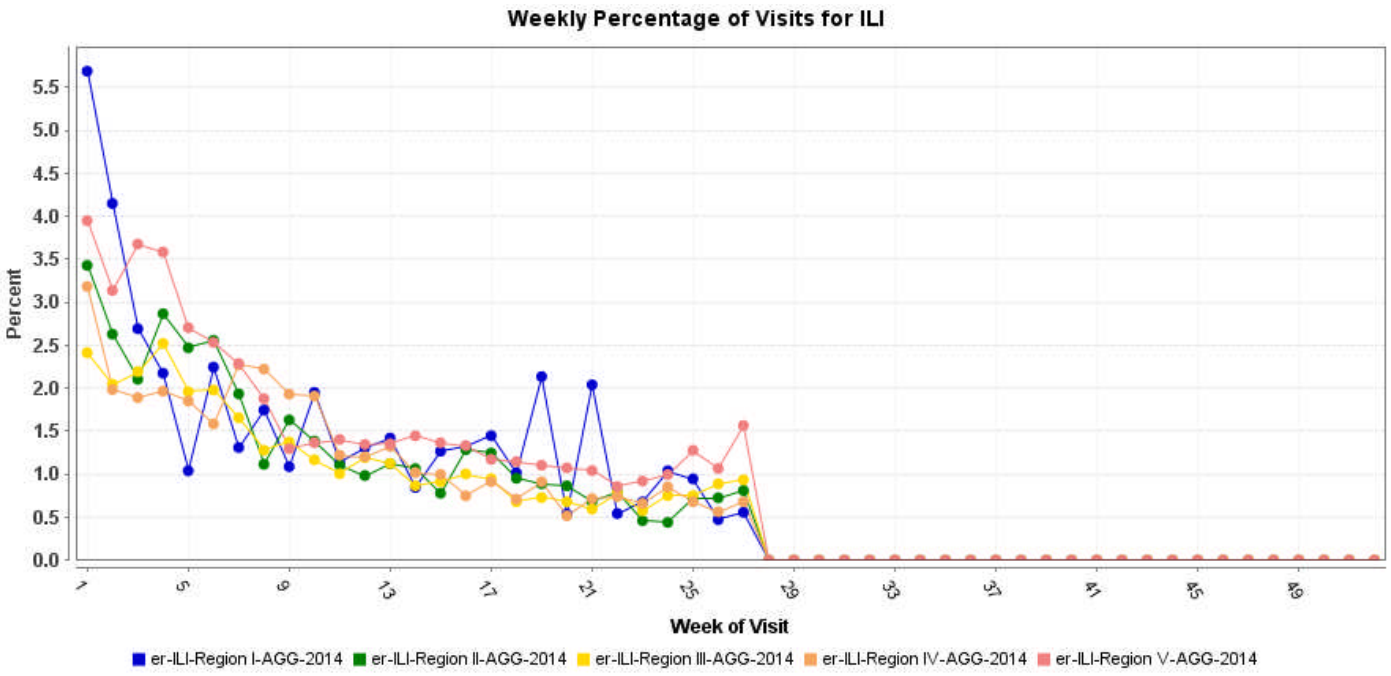
## SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



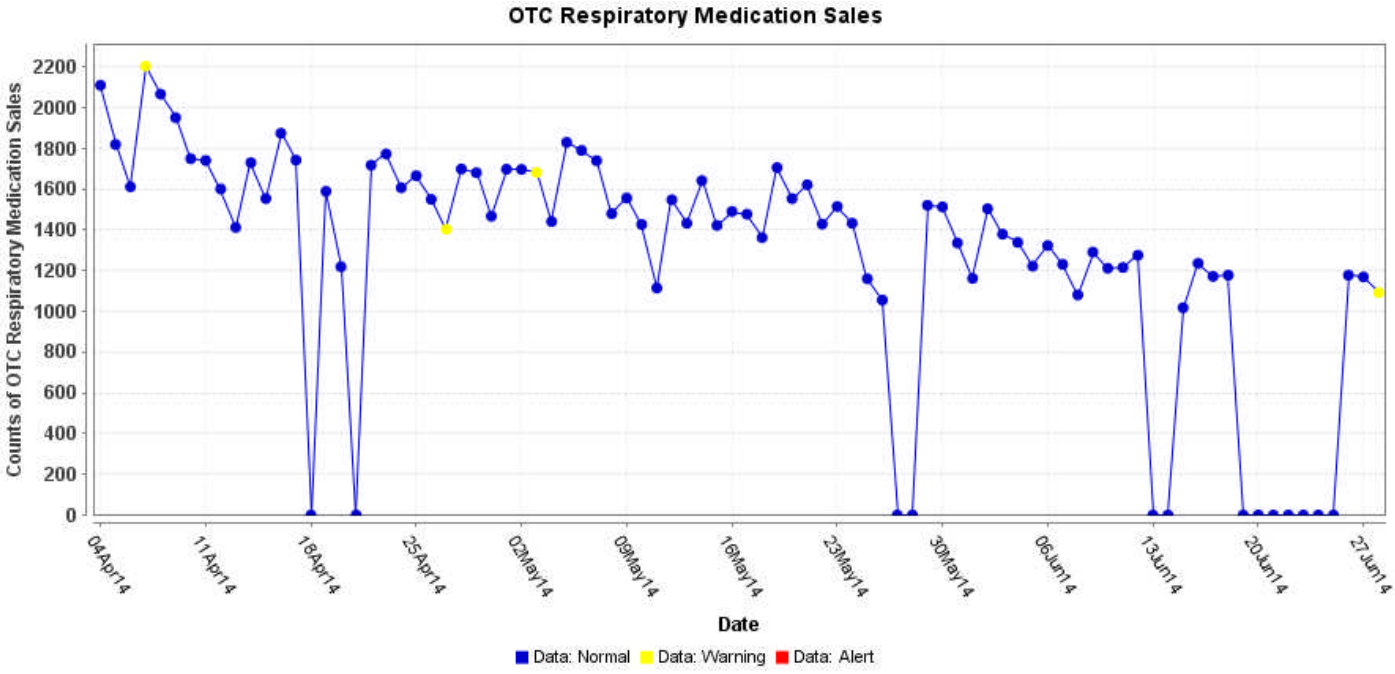

* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total




*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

**OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:**

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



**PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase**: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

**NATIONAL DISEASE REPORTS***

**PARALYTIC SHELLFISH POISONING (ALASKA):** 23 June 2014, The probable case of paralytic shellfish poisoning at Kenai Peninsula's Clam Gulch overnight Sun 22 Jun 2014, was the 1st ever recorded at the popular Southcentral clamming area, and the 2nd most northern probable case of the toxin ever reported in Alaska, state officials said Tue 17 Jun 2014. A Kenai resident harvested razor and possibly butter clams -- also known as surf or pink-neck clams, according to Department of Fish and Game sport fish biologist Mike Booz -- and ate the clams later that day. The person became ill overnight, and suffered "classic" paralytic shellfish poisoning symptoms of vomiting, headache, shortness of breath, tingling around the mouth, and a floating sensation. It's the 1st probable case of paralytic shellfish poisoning ever reported at Clam Gulch, said Dr Michael Cooper, infectious disease program manager with the state Division of Public health, with records on the beach ranging back to the 1980s. Paralytic shellfish poisoning is caused by eating shellfish contaminated with toxin-producing dinoflagellate algae. The dinoflagellate are reddish-brown in color and can cause red streaks to appear in the ocean, called "red tides," according to the CDC.

Most reports of paralytic shellfish poisoning in occur in Southeast, lower Southcentral areas such as Kodiak, and Southwest Alaska, Cooper said. There's only 1 other probable case of paralytic shellfish poisoning from a more northern locale, recorded in Nome earlier in 2014. Cooper said. A resident had eaten crab in a broth and became sick with the classic symptoms, but later urine analysis and samples of the broth came back negative. However, enough time had passed between the urinalysis that the negative testing "doesn't rule it out," Cooper said, and the broth may not have contained the toxin present in the crab. While reports on paralytic shellfish poisoning vary from year to year, Cooper said the "vast majority" of cases likely go unreported. Between 2002 and 2011, there were 41 confirmed and probable cases of paralytic shellfish poisoning, but more than half of those cases were during a 2011 outbreak in Southeast Alaska. The last confirmed case of paralytic shellfish poisoning in the Kachemak Bay area, southeast of Clam Gulch, occurred in the 1970s, Cooper said.

Cook Inlet has largely been isolated from reported cases of paralytic shellfish poisoning, Booz said. Still, "our message is that you consume at your own risk," he said. Clam Gulch is famous for the razor clams harvested from the beach adjacent to the state recreation area, according to the Alaska Division of Parks and Outdoor Recreation. Booz said that aerial surveys estimated that several hundred people were digging clams on the beach on both Friday and Saturday, 13 and 14 Jun 2014. There were "definitely plenty of people around," he said. Most people digging razor clams do so near to the beach's access point, Booz said. However, the Clam Beach area ranges north to the Kasilof River, and south to the Ninilchik River, Booz said. The area where the probable case of poisoning occurred was listed in a press release as 1.5 miles [2.4 km] "down the beach, near the big tower," which Booz identified as a nearby cell phone tower.

Between 2010 and 2012, roughly 330 000 razor clams were harvested on the east side of the Kenai Peninsula, between the community of Anchor Point to the Kasilof River, Booz said. While all beaches where shellfish are harvested commercially are regularly tested for the toxin, there's no widespread testing of beaches where Alaskans harvest shellfish recreationally. The sheer number of miles of Alaska's coastline "makes it impossible for any agency to go out and test every beach," said Ty Keltner, spokesperson for the Department of Environmental Conservation [DEC]. In 2012, the DEC's recreational shellfish monitoring pilot program began testing some popular sites around the state. Last year [2013] the Kachemak Bay Research Reserve began testing Clam Gulch shellfish through the program, Booz said. Last summer (2013), all shellfish tested out of Clam Gulch tested negative for the toxin, Booz said. This year's [2014] testing had just begun, with razor and surf clams harvested over the weekend [14-15 Jun 2014] and sent into the DEC's Anchorage office for testing this week. Fish and Game personnel were returning to Clam Gulch on Tue 17 Jun 2014, to collect more razor clams for testing, Booz said, following Sunday's report of possible poisoning. Testing of recreationally harvested shellfish takes roughly 5 days, said Matthew Forester, a DEC official.

Paralytic shellfish poison can be present in all locally harvested shellfish, including clams, mussels, oysters, geoducks and scallops, according to the state Division of Public Health. Early warning signs of paralytic shellfish poisoning include a tingling of the lips and tongue. The toxins can cause fatalities in as little as 2 hours. There's no cure or "antitoxin" for paralytic shellfish poisoning, Cooper said. There's also no way to clean or cook the toxin out of shellfish, and toxins can be present in shellfish in varying amounts on the same beach, according to the Division of Public Health. Cooper recommended that people who develop symptoms go to their health care provider for monitoring. The last reported fatalities "likely related" to paralytic shellfish poisoning occurred in the 1990s, when 2 people died, Cooper said. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

**INTERNATIONAL DISEASE REPORTS***

**HANTAVIRUS (AMERICAS, CANADA):** 24 June 2014, They have big ears and striped bodies, but deer mice have the potential to pack fatal punch. Humans who come into contact with contaminated airborne particles from the urine, saliva, and droppings of deer mice can contract a severe and fatal lung disease known as hantavirus pulmonary syndrome (HPS). On Tuesday morning [24 Jun 2014], the provincial health ministry confirmed an adult in southern Saskatchewan died after contracting [a] hantavirus [infection]. It is the 1st fatality involving [a] hantavirus the province has recorded in 2014. At a press conference later in the afternoon, Denise Werker, the deputy chief medical health officer, did not tell reporters the age, sex, or health region the deceased contracted the illness. According to Dr Mark Vooght, chief medical officer for the Five Hills Health Region (FHHR), the hantavirus victim did not come from the FHHR. "Unfortunately, these cases do occur and one needs to take precautions from preventing this sort of thing from happening," said Vooght. He added that when people enter buildings where they smell, or see dead mice, they need to make sure they are not potentially exposed to the airborne virus. Some of the precautions people should take include wearing gloves, an N-95 or N-100 protective mask, and double bag the dead mice they are cleaning up. And only remove your mask after you have thoroughly washed your hands, says Vooght. However, before cleaning the rodent-infested areas, it is recommended that the building's doors and windows be opened to provide ventilation for at least 30 minutes. Symptoms of hantavirus [infections] include muscle aches, coughing, fever, headaches, nausea, and vomiting. Shortness of breath is another symptom, which can develop into HPS, which, according to Dr Vooght, "is fatal in about 30 per cent of cases." Over the last 20 years, there have been 27 cases of HPS in Saskatchewan, 9 of which have been fatal. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

**SALMONELLOSIS (CANADA):** 25 June 2014, This public health notice has been updated to include 8 additional cases that have been added to the investigation. There are now 52 cases in 4 provinces [British Columbia, Alberta, Ontario, Quebec] involved in this investigation and the Canadian Food Inspection Agency has updated the food recall warning to include additional information for chia seed products. The Public Health Agency of Canada is collaborating with provincial public health partners, the Canadian Food Inspection Agency, and Health Canada to investigate 52 Canadian cases of salmonellosis linked to the consumption of sprouted chia seed powder. Sprouted chia seed powder is made from ground, dried sprouted chia seeds. As a part of this investigation, the Canadian Food Inspection Agency has issued food recall warnings for various products containing chia seeds and sprouted chia seed powder under the brands Organic Traditions, Back 2 the Garden, Intuitive Path SuperFoods, Harmonic Arts Botanical Dispensary, Naturally Organic, Pete's Gluten Free, Noorish Superfoods, MadeGood, and Dietary Express. These products have been recalled and are being removed from the marketplace due to possible Salmonella contamination. The risk to Canadians is low, but those who have bought the recalled products sold under the recalled brands should not consume these products and should consult their health professional if they suspect they have symptoms of salmonellosis. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from http://www.promedmail.org/.

**OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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**NOTE**: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Zachary Faigen, MSPH, REHS
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: Zachary.Faigen@maryland.gov

Anikah H. Salim, MPH, CPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-2074
Fax: 410-333-5000
Email: Anikah.Salim@maryland.gov

**Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents**

## Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

| Syndrome | Definition | Category A Condition |
|---|---|---|
| Botulism-like | ACUTE condition that may represent exposure to botulinum toxin<br>ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy.<br>ACUTE descending motor paralysis (including muscles of respiration)<br>ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point. | Botulism |
| Hemorrhagic Illness | SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola<br>ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF<br>ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria | VHF |
| Lymphadenitis | ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck) | Plague (Bubonic) |
| Localized Cutaneous Lesion | SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia<br>ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia<br>INCLUDES insect bites<br>EXCLUDES any lesion disseminated over the body or generalized rash<br>EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease | Anthrax (cutaneous)<br>Tularemia |
| Gastrointestinal | ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract<br>SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis<br>ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea<br>EXCLUDES any chronic conditions such as inflammatory bowel syndrome | Anthrax (gastrointestinal) |

**Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents**
(continued from previous page)

| Syndrome | Definition | Category A Condition |
|---|---|---|
| Respiratory | ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)<br>SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus<br>ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis<br>ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain<br>EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.) | Anthrax (inhalational)<br>Tularemia<br>Plague (pneumonic) |
| Neurological | ACUTE neurological infection of the central nervous system (CNS)<br>SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis<br>ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS<br>ACUTE non-specific symptoms of CNS infection such as meningismus, delerium<br>EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's | Not applicable |
| Rash | ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)<br>SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox<br>ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem<br>EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea<br>EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema | Smallpox |
| Specific Infection | ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal)<br>INCLUDES septicemia from known bacteria<br>INCLUDES other febrile illnesses such as scarlet fever | Not applicable |

**Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents** (continued from previous page)

| Syndrome | Definition | Category A Condition |
|---|---|---|
| Fever | ACUTE potentially febrile illness of origin not specified<br>INCLUDES fever and septicemia not otherwise specified<br>INCLUDES unspecified viral illness even though unknown if fever is present<br>EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome | Not applicable |
| Severe Illness or Death potentially due to infectious disease | ACUTE onset of shock or coma from potentially infectious causes<br>EXCLUDES shock from trauma<br>INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births<br>EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths | Not applicable |